

What is claimed is:

1. An electroluminescent lamp (EL lamp) comprising:

(a) a transparent substrate;

5 (b) a light-transmitting electrode-layer formed on said transparent substrate;

(c) an adhesive synthetic resin layer formed on said light-transmitting electrode-layer;

(d) a luminescent layer formed of said synthetic resin layer with phosphor particles fixed uniformly;

10 (e) a dielectric layer formed on said luminescent layer; and

(f) a back electrode-layer formed on said dielectric layer.

2. The EL lamp of claim 1,

15 wherein said luminescent layer is formed by spraying the phosphor particles on a surface of said synthetic resin layer, then heating and pressing said synthetic resin layer for sinking the phosphor particles in said synthetic resin layer.

3. The EL lamp of claim 1,

20 wherein said synthetic resin layer is not adhesive at a room temperature.

4. The EL lamp of claim 1,

25 wherein a diameter of one of the phosphor particles is greater than a thickness of said synthetic resin layer.

5. The EL lamp of claim 1,

wherein a principal ingredient of said synthetic resin layer is one of cyano resin, fluororubber, polyester resin and phenoxy resin.

6. The EL lamp of claim 1,

5                wherein a thickness of said synthetic resin layer is not less than 0.01  $\mu\text{m}$  and not more than 50  $\mu\text{m}$ .

7. The EL lamp of claim 1,

                 wherein a diameter of one of the phosphor particles is not less than  
10    25  $\mu\text{m}$  and not more than 90  $\mu\text{m}$ .

8. The EL lamp of claim 1,

                 wherein a shape of said transparent substrate is a curved-surface  
                 shape.  
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9. The method for manufacturing an EL lamp comprising the steps of:

- (a) forming a light-transmitting electrode-layer on a transparent substrate;
- (b) forming an adhesive synthetic resin layer on the light-  
20    transmitting electrode-layer;
- (c) forming a luminescent layer by sticking phosphor particles on the synthetic resin layer uniformly;
- (d) forming a dielectric layer on the luminescent layer; and
- (e) forming a back electrode-layer on the dielectric layer.

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10. The method for manufacturing the EL lamp of claim 9,

                 wherein the synthetic resin layer is not adhesive at a room

temperature.

11. The method for manufacturing the EL lamp of claim 9,  
wherein a diameter of one of the phosphor particles is greater than a  
5 thickness of the synthetic resin layer.

12. The method for manufacturing the EL lamp of claim 9,  
wherein a thickness of the synthetic resin layer is not less than 0.01  
μm and not more than 50 μm.

10 13. The method for manufacturing the EL lamp of claim 9,  
wherein a diameter of one of the phosphor particles is not less than  
25 μm and not more than 90 μm.

15 14. The method for manufacturing the EL lamp of claim 9,  
wherein step (c) further comprises:  
i ) spraying the phosphor particles on a surface of the synthetic resin  
layer; and  
ii ) heating and pressing the synthetic resin layer, thereby sinking  
20 the phosphor particles in the synthetic resin layer.

15. The method for manufacturing the EL lamp of claim 9,  
wherein in step (d), the dielectric layer is formed on the luminescent  
layer by coating and drying paste of a high dielectric constant, and solvent  
25 which one of dissolves and swells the synthetic resin layer is used as organic  
solvent included in the paste of a high dielectric constant.

16. The method for manufacturing the EL lamp of claim 9,

wherein in step (c), after the phosphor particles are blown to a surface of the synthetic resin layer with heated air, the phosphor particles not fixed on the surface of the synthetic resin layer are removed by a sucking nozzle.

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